

REMARKS

The above amendment is responsive to the Office Action, a first action FINAL on the RCE, dated 18 Sep 2006.

Claims 1-5, 8-14, 18-25, 29-30, 34-41, 43, and 45 -53 are in the case, none as yet allowed.

Interview

Applicant's attorney expresses appreciation for courtesy extended by Examiner Victor D. Lesniewski in a telephone conference initiated by the undersigned on or before 24 Oct 2006. In that telecon, the Examiner suggested that applicants submit a proposed amendment to include material not already explicitly stated in the claims, and initiate an interview with him and his supervisor to see if agreement can be reached.

This Amendment after FINAL is in response to that suggestion, and is accompanied by a Request for Interview in the hope that prosecution may be moved forward to allowance

of claims at this stage of the prosecution.

35 U.S.C. 103

Claims 1-5, 8-14, 18-25, 29-30, 34-41, 43, and 45 -53 have been rejected under 35 U.S.C. 103(a), with claims 1-5, 8-14, 22, 24, 25, 29, 30, 34-37, 39, 41, 43, 45, 47-50, 52, and 53 rejected over Lucovsky (U.S. Patent 6,868,450) in view of Jackowski et al. (U.S. Patent 6,141,686, hereinafter Jackowski), and claims 18-21, 23, 38, 40, 46, and 51 over Lucovsky in view of Jackowski, and further in view of Fiveash et al. (U.S. Patent 6,076,168, hereinafter Fiveash.)

In the following table, high-level descriptions of the three relevant art citations (Jackowski, Lucovsky, and Fiveash) are compared with the current application (Boden) in the hope that this will help correct a few inaccuracies which have crept into the arguments.

	Jackowski (1)	Lucovsky (2)	Fiveash (3)	Boden (4)
1. Does IP packet filtering?	no (note 1)	yes (note 4)	yes	yes
2. Does filtering actions permit & deny?	no	yes	yes	yes
3. Does packet filtering	no	no	yes	yes

within IP layer?	(note 2)			
4. Does packet filtering on non-IP packet attributes?	no	no	no	yes
5. Allows at IP filter creation time (in GUI or similar) the expression of filters with non-IP attributes?	no	no	no	yes
6. Allows filter expressions including non-IP attributes?	no	no	no	yes
7. Extends the syntax of filter rules to allow inclusion of non-IP packets?	no	no	no	yes
8. Prioritizes IP packets?	yes	no	no	no
9. Function uses non-IP packet data?	no	yes	no	yes
10. Uses data like user-related, process-related, job or application related?	no	yes	no	yes
11. Has a layer of function above the transport layer and below the socket layer?	yes (fig 4, 50)	yes (fig 2, 116)	no	no
12. Has an associated 'database' of process attributes?	no mention	yes (fig 2, 118)	no	no
13. Has a layer of function between IP layer and network [device] driver?	no	yes (fig 2, 140, 150)	no	no
14. Frequency counts of IP packets?	yes	no	no	no
15. Requires use of plugin's or extensions?	yes (fig 4,5; ACE,others)	no	no	no
16. Works for all inbound and outbound	yes	yes	yes	yes

TCP/IP traffic?				
17. Non-IP traffic attributes are obtained directly from the operating system kernel?	n/a	no	n/a	yes
18. Non-IP traffic attributes includes full range of user, process and job (application) attributes?	n/a	no	n/a	yes
19. Has a 'lookahead' fn to handle inbound traffic?	no (note 3)	no (note 3)	no	yes
20. Determines task or kernel thread id?	cannot determine	cannot determine	cannot determine	yes
21. Supports multiple transports (TCP,UDP,RAW)?	Only TCP is ever mentioned: unlikely	implicit; likely	implicit; likely	yes (explicit)
	Jackowski (1)	Lucovsky (2)	Fiveash (3)	Boden (4)

Note 1. With respect to IP packet filtering as referenced in Jackowski, applicant argues that Jackowski is about an application classifier that gathers network traffic statistics. The mention of the word 'filter' in Jackowski claim 18 refers to 'filtering' used to 'select plugin'. This is not IP packet filtering, as commonly used to refer to a firewall function, where the filtering is used to permit or deny packets.

Note 2. With respect to packet filtering within the

IP layer. Jackowski does not operate within the IP layer, as is clearly taught by Figures 4, 5, 10, 11.

Note 3. With respect to a 'look-ahead' function to handle inbound traffic, neither Jackowski nor Lucovsky teach such. The Examiner states (paragraph 21 of the Office Action) that the combination of Lucovsky and Jackowski does disclose the look-ahead function being executed within a TCP/IP stack. Applicant (Boden) operates filtering within just the IP layer, and clearly Lucovsky and Jackowski do not. See Jackowski Figs 4, 5, 10, 11, and Lucovsky, Fig. 2. In Lucovsky, though it is not clear, it is possible that Figure 2 item 110 (TCP/IP DRIVER) is the IP layer. Consequently, Lucovsky and Jackowski do not teach look-ahead within the IP layer, and it is questionable that they teach look-ahead at all.

Note 4. With respect to IP packet filtering, the Examiner (paragraph 24 of the Office Action) notes that applicant argues that Lucovsky does not do IP packet filtering. Applicant agrees with the Examiner that Lucovsky does do IP packet filtering.

The net of the above table and notes is as follows:

taking Jackowski which does *not* do filtering and does *not* do it in the IP layer, and combining that with Lucovsky which does *not* do it in the IP layer but does use non-IP packet data, does *not* teach applicant's (Boden) invention which does filtering in the IP layer with non-IP packet data. The differences between Lucovsky and Boden become sharper upon considering how Lucovsky gets and uses the data as compared to Boden. In this regard, see rows 11, 12, and 13 of the above table. Consequently, Boden does not use Lucovsky features represented by Lucovsky elements 115, 118, 116, 130, 140, and 150. All of these differences, applicant argues, render the Boden invention non-obvious with respect to the combination of Lucovsky and Jackowski, or of Lucovsky, Jackowski, and Fiveash.

Consequently, the above distinctions are brought into the amended claims by the following recitations:

References in the claims to the TCP/IP stack are amended to refer to the IP layer of the TCP/IP stack. Support for this is found in applicant's specification at page 17, line 20 to page 18, line 9.

Recitation of 'marks packet as non-deliverable' is

amended to read 'deny', which is normal packet filtering terminology.

Selected claims are amended to recite the distinctions noted in rows 4-7 of the above table, support for which is found in applicant's specification at page 9, lines 17 to page 10 line 22, and page 17, lines 7-9:

Doing packet filtering on non-IP packet attributes;

Allowing at IP filter creation time (in GUI or similar) the expression of filters with non-IP attributes; and

Allowing filter expressions including non-IP attributes.

SUMMARY

Applicants urge that claims 1-5, 8-14, 18-25, 29-30, 34-41, 43, and 45 -53 be allowed.

The Application is believed to be in condition for

allowance and such action by the Examiner is urged. Should differences remain, however, which do not place one/more of the remaining claims in condition for allowance, the Examiner is requested to phone the undersigned at the number provided below for the purpose of providing constructive assistance and suggestions in order that allowable claims can be presented, thereby placing the Application in condition for allowance without further proceedings being necessary.

Sincerely,

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By


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